1. (original) A method for making a nano-size semiconductor component within a wide-bandgap semiconductor substrate, the method comprising, the steps of:

providing a wide-bandgap semiconductor substrate;

directing a first thermal energy beam onto a first portion of the wide-bandgap semiconductor substrate for heating the first portion to change the structure of the first portion of the wide-bandgap semiconductor substrate into a first element of a semiconductor component; and

directing a second thermal energy beam onto a second portion of the wide-bandgap semiconductor substrate adjacent to the first portion of the wide-bandgap semiconductor substrate for heating the second portion to form a second element of the semiconductor component.

2. (original) A method of claim 1, in which one of the first and second thermal energy beams is selected from the group consisting of a beam of charged particles, a beam of electrons, a beam of ions, a beam of electromagnetic radiation and a laser beam.

3. (original) A method of claim 1, in which the nano-size semiconductor component is fabricated parallel to an exposed surface.

4. (original) A method of claim 1, in which the nano-size semiconductor component is selected from the group consisting of nanotransistors, nanodiodes, nanosensors ,nano-light emitting diodes.

5. (original) A method of claim 1, in which the nano-size semiconductor component is selected from the group consisting of circuits of nanodevices, circuits of microdevices and nanodevices and circuits of combinations of microdevices, nanodevices, nanocircuits and microciruicts.

6. (original) A method of claim 1 where nano-size semiconductor component is directly fabricated.

7. (original) A method of claim 1, in which one of the first and second thermal energy beams is a beam emanating from a laser of a type selected from the group consisting of Nd:YAG , frequency doubled Nd:YAG or Excimer lasers.

8. (original) A method of claim 1, in which one of the first and second thermal energy beams is a beam emanating from a Nd:YAG laser having a wavelength emission of 1064 nanometers with a 260 nanosecond pulse width and a 35 kilohertz repetition rate at a power level of at least 40 watts.

9. (original) A method of claim 1, in which the wide-bandgap semiconductor has a bandgap greater than 2.0 electron volts.

10. (original) A method of claim 1, in which the wide-bandgap semiconductor is selected from the IV group of the periodic table and having bandgap greater than 2.0 electron volts.

11. (original) A method for making a nano-size semiconductor component within a wide-bandgap semiconductor substrate, the method comprising, the steps of:

providing a wide-bandgap semiconductor substrate of essentially a single crystal compound;

directing a first thermal energy beam onto a first portion of the wide-bandgap semiconductor substrate for heating the first portion to change the crystalline compound of the first portion of the wide-bandgap semiconductor substrate into a first element of a semiconductor component; and

directing a second thermal energy beam onto a second portion of the wide-bandgap semiconductor substrate adjacent to the first portion of the wide-bandgap semiconductor substrate for heating the second portion to form a second element of the semiconductor component.

12. (original) A method of claim 11, in which the wide-bandgap semiconductor compound is selected from the III group and the V group of the periodic table and having bandgap greater than 2.0 electron volts.

13. (original) A method of claim 11, in which the wide-bandgap semiconductor compound is of a material selected from the group consisting of Aluminum Nitride, Silicon Carbide, Boron Nitride, Gallium Nitride and diamond.

14. (original) A method of claim 11, in which the wide-bandgap semiconductor compound has one element of the compound with a higher melting point element than the other element of the compound; and

the heating of the region of the substrate increasing the concentration of the higher melting point element within the region for forming the conductive element within the wide-bandgap semiconductor substrate.

15. (original) A method for making a nano-size field effect transistor within a wide-bandgap semiconductor substrate, the method comprising, the steps of:

providing a wide-bandgap semiconductor substrate of essentially a single crystal compound; and

directing a first thermal energy beam onto a first portion of the wide-bandgap semiconductor substrate for heating the first portion to change the crystalline structure of the first portion of the wide-bandgap semiconductor substrate into a gate of the nano-size field effect transistor;

directing a second thermal energy beam onto a second portion of the wide-bandgap semiconductor substrate adjacent to the first portion of the wide-bandgap semiconductor substrate for forming a source of the of the nano-size field effect transistor; and

directing a third thermal energy beam onto a third portion of the wide-bandgap semiconductor substrate adjacent to the first portion of the wide-bandgap semiconductor substrate for forming a drain of the of the nano-size field effect transistor.

16. (original) A method of claim 15, in which one of the first and second thermal energy beams is a beam emanating from a laser of a type selected from the group consisting of Nd:YAG , frequency doubled Nd:YAG or Excimer lasers.

17. (original) A method of claim 15, in which one of the first and second thermal energy beams is a beam emanating from a Nd:YAG laser having a wavelength emission of 1064 nanometers with a 260 nanosecond pulse width and a 35 kilohertz repetition rate at a power level of at least 40 watts.

18. (original) A method of claim 15, in which the wide-bandgap semiconductor has a bandgap greater than 2.0 electron volts.

19. (original) A method of claim 15, in which the wide-bandgap semiconductor is selected from the IV group of the periodic table and having bandgap greater than 2.0 electron volts.

20. (original) A method of claim 15, in which the wide-bandgap semiconductor compound is selected from the III group and the V group of the periodic table and having bandgap greater than 2.0 electron volts.

21. (original) A method of claim 15, in which the wide-bandgap semiconductor compound is of a material selected from the group consisting of Aluminum Nitride, Silicon Carbide, Boron Nitride, Gallium Nitride and diamond.

22. (original) A method of claim 15, in which the wide-bandgap semiconductor compound has one element of the compound with a higher melting point element than the other element of the compound; and

the heating of the region of the substrate increasing the concentration of the higher melting point element within the region for forming the conductive element within the wide-bandgap semiconductor substrate.

23. (original) A method for making a nano-size conductive element within a wide-bandgap semiconductor substrate, the method comprising, the steps of:

providing a wide-bandgap semiconductor substrate; and

focusing a thermal energy beam into a region internal the wide-bandgap semiconductor substrate for heating the region internal the wide-bandgap semiconductor substrate for changing the structure of the wide-bandgap semiconductor to provide the nano-size conductive element.

24. (currently amended) A method of claim 23, in which ~~one of~~ the ~~first and second~~ thermal energy ~~beams~~ beam is selected from the group consisting of a beam of charged particles, a beam of electrons, a beam of ions, a beam of electromagnetic radiation and a laser beam.

25. (original) A method of claim 23, wherein the step of focusing the thermal energy beam includes concentrating a thermal energy beam to a focal point.

26. (original) A method of claim 23, wherein the step of focusing the thermal energy beam includes projecting two thermal energy beams to intersect within the region internal the wide-bandgap semiconductor substrate.

27. (original) A method for making a nano-size element within a wide-bandgap semiconductor substrate, the method comprising, the steps of:

providing a wide-bandgap semiconductor substrate;

providing a doping atmosphere for the wide-bandgap semiconductor substrate; and

projecting a thermal energy beam onto the wide-bandgap semiconductor substrate for heating the wide-bandgap semiconductor substrate for changing the structure of the wide-bandgap semiconductor with the doping atmosphere to provide the nano-size element.

28. (original) A method of claim 27 wherein the doping atmosphere is selected from the group consisting of a gaseous metallo-organic doping atmosphere, a vapor metallo-organic doping atmosphere for laser doping the wide-bandgap semiconductor substrate.

29. (original) A method of claim 27 wherein the doping atmosphere is selected from the group consisting of nitrogen or phosphorous for creating an N-type semiconductor or aluminum or boron for creating a P-type semiconductor.

30. (original) A method for making a nano-size element within a wide-bandgap semiconductor substrate, the method comprising, the steps of:

providing a wide-bandgap semiconductor substrate;

projecting a thermal energy beam onto the wide-bandgap semiconductor substrate for heating the wide-bandgap semiconductor substrate for changing the structure of the wide-bandgap semiconductor with to provide the nano-size conducting element;

providing a doping atmosphere for the wide-bandgap semiconductor substrate; and

projecting a thermal energy beam onto a portion of the nano-size conducting element for heating the portion of the nano-size conducting element in the presence of the doping atmosphere for changing the structure of the portion of the nano-size conducting element to provide the nano-size element.